IN THE CLAIMS

Please amend Claims 1, 3, 5, 7, 10, 12, 14, 16-18 and 21-24 as indicated.

Please cancel Claims 2, 8, 9, 13, 15, 19, and 20 as indicated.

1. (Currently Amended) A system for correcting wide-angle image data, said system comprising:

~~a first input buffer configured to store wide-angle image data~~;

an image data processor ~~operably coupled to said first input buffer and~~ configured to transform distorted wide angle image data ~~stored in the first input buffer~~ into ~~corrected~~ substantially undistorted image data on a pixel-by-pixel basis; and

an encoder operably coupled to said image data processor and configured to receive and encode the ~~corrected~~ substantially undistorted image data ~~in a format suitable for at least one of display and recording of corrected images, said corrected image data being~~ transmitted from the image data processor ~~to the encoder~~ upon completion of each pixel transformation ~~and~~, said substantially undistorted image data not being stored in a buffer from the time of transformation by the image data processor until the time said ~~undistorted image data is received by the~~ encoder produces an output signal, said output signal being produced substantially in real time.

2. Cancelled.

3. (Currently Amended) A system according to claim 1, further comprising:

a look-up table memory operably coupled to the image data processor, said look-up table memory being configured to store transformation calculation data to be used by the image data processor to transform distorted wide angle image data ~~stored in the first input buffer~~ into ~~corrected~~ substantially undistorted image data.

4. (Original) A system according to claim 1, further comprising:

a user input module operably coupled to the image data processor and configured to provide user command data to the image data processor.

5. (Currently Amended) A system according to claim 4, wherein:

said user input module is further configured to calculate a value based on user input, and to communicate said calculated value to the image data processor; and

said image data processor is further configured to use said calculated value to transform distorted wide angle image data ~~stored in the first input buffer~~ into ~~corrected~~ substantially undistorted image data.

6. (Previously Presented) A system according to claim 1, wherein said image data processor comprises a processing device, the processing device being at least one of a field programmable gate array and an application specific integrated circuit.

7. (Currently Amended) A system according to claim 1, further comprising a source of distorted wide-angle image data operably coupled to said ~~first input buffer~~ image data processor.

8. Cancelled.

9. Cancelled.

10. (Currently Amended) A system according to claim 7, wherein said source of distorted wide-angle image data comprises a video camera.

11. (Previously Presented) A system according to claim 10 wherein the video camera produces video signals in a standard format, the standard format being one of PAL, SECAM and NTSC.

12. (Currently Amended) A system according to claim 1, further comprising a monitor operably coupled to said encoder for displaying ~~corrected~~ images.

13. Cancelled.

14. (Currently Amended) A method for at least one of displaying ~~and/or~~ and recording ~~corrected~~ substantially undistorted image data from distorted wide-angle image data, said method comprising steps of:

~~buffering wide-angle image data;~~

transforming the ~~buffered~~ distorted wide-angle image data into ~~corrected~~ substantially undistorted image data on a pixel-by-pixel basis;

transmitting the ~~corrected~~ substantially undistorted image data to an encoder upon completion of each pixel transformation without buffering the ~~corrected~~ substantially undistorted image data;

encoding the ~~corrected~~ substantially undistorted image data into one or more output signals, said one or more output signals being produced substantially in real time; and

at least one of displaying ~~and/or~~ and recording the output signals from the encoder.

15. Cancelled.

16. (Currently Amended) A method according to claim 14, further comprising steps of:

storing transformation calculation data in a look-up table; and

using transformation calculation data stored in the look-up table to transform the ~~buffered~~ distorted wide angle image data ~~stored~~ into ~~corrected~~ substantially undistorted image data.

17. (Currently Amended) A method according to claim 14, further comprising steps of:

providing user command data to the image data processor; and

using the user command data to transform the ~~buffered~~ distorted wide angle image data into ~~corrected~~ substantially undistorted image data.

18. (Currently Amended) A method according to claim 17, further comprising steps of:

calculate a value based on user command data; and

using said calculated value to transform the ~~buffered~~ distorted wide angle image data into ~~corrected~~ substantially undistorted image data.

19. Cancelled.

20. Cancelled.

21. (Currently Amended) A system for correcting wide-angle image data, said system comprising:

~~means for storing wide-angle image data~~;

means for transforming distorted wide angle image data ~~stored in said storage means~~ into ~~corrected~~ substantially undistorted image data on a pixel-by-pixel basis~~, said image transformation means being operably coupled to said storage means~~; and

means for encoding the ~~corrected~~ substantially undistorted image data ~~into a format suitable for at least one of display and recording of corrected images~~, said ~~corrected~~ substantially undistorted image data being transmitted from the image transformation means to the encoder means upon completion of each pixel transformation without storing the ~~corrected~~ substantially undistorted image data in a buffer from the time of transformation by the image transformation means until the time the ~~corrected~~ substantially undistorted image data is received by the encoder means, the encoder means producing an output signal, said output signal being produced substantially in real time, said encoder means being operably coupled to said image transformation means.

22. (Currently Amended) A system according to claim 1, wherein the encoded ~~corrected~~ substantially undistorted image data comprises an output signal, and wherein said image data processor transforms a pixel of said distorted wide angle image data if the data for the pixel is required for the output signal.

23. (Currently Amended) A method according to claim 14, further comprising transforming a pixel of the distorted wide-angle image data if the data for the pixel is required for the one or more output signals from the encoder.

24. (Currently Amended) A system according to claim 21, wherein the encoded ~~corrected~~ substantially undistorted image data comprises an output signal, and wherein said image transformation means transforms a pixel of said distorted wide angle image data if the data for the pixel is required for the output signal.